

IN THE CLAIMS:

Please cancel claims 1-35.

Please add new claims 36-62 as follows:

36. (New) A downhole bypass tool comprising:

a body adapted to be mounted on a tubular string and defining an axial through bore to allow fluid to flow through the body and including a wall defining a fluid port for permitting passage of fluid between the body bore and the exterior of the body;

an operating sleeve mounted to the body and normally positioned to close the fluid port;

an activating device adapted to be dropped through the string to land on the operating sleeve; and

a flow restriction operatively associated with the operating sleeve and located upstream of the port, the flow restriction being configured to create a fluid flow-related force on the operating sleeve for moving the sleeve to open the body port following landing of the activating device.

37. (New) The tool of claim 36, wherein the activating device provides the flow restriction.

38. (New) The tool of claim 36, further comprising a biasing member for urging the operating sleeve to close the fluid port.

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1 *Sub 32* 39. (New) ~~The tool of claim 36, further comprising locking means for~~
2 retaining the operating sleeve in position to close the fluid port, the locking means
3 releasing the operating sleeve on landing of the activating device on the sleeve.

1 40. (New) The tool of claim 39, wherein the locking means includes a
2 coupling for releasably coupling the operating sleeve to the body.

1 41. (New) The tool of claim 36, further comprising at least two axially
2 spaced flow restrictions associated with the operating sleeve and located upstream of
3 the port.

1 42. (New) The tool of claim 36, wherein the activating device is an
2 activating sleeve having an axial through bore.

1 43. (New) The tool of claim 36, wherein the activating device is a
2 deformable plug.

1 44. (New) The tool of claim 43, wherein the deformable plug is a ball.

1 45. (New) The tool of claim 36, further comprising indexing means for
2 controlling movement of the operating sleeve and configured to permit the operating
3 sleeve to be retained in one of the port open and port closing positions while fluid
4 flow through the tool is maintained at a normal operational level.

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46. (New) The tool of claim 45, wherein the indexing means includes a cam arrangement.

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47. (New) A method of providing fluid bypass in a downhole string, the method comprising the steps:

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providing a bypass tool having a body defining an axial through bore and including a wall defining a fluid port, and an operating sleeve mounted to the body and normally positioned to close the port;

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running the tool into a bore on a string;

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dropping an activating device through the string to land on the operating sleeve; and

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passing fluid through the string, body and operating sleeve, and also a flow restriction operatively associated with the operating sleeve and located upstream of the port, at selected flow rates to create selected fluid flow-related forces on the operating sleeve to move the sleeve to open the port.

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48. (New) The method of claim 47, further comprising maintaining fluid flow through the string, body and operating sleeve at a normal operational level at least as the activating device passes through the string and lands on the operating sleeve.

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49. (New) The method of claim 48, further comprising maintaining fluid flow through the string, body and operating sleeve at a normal operational level

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1 following landing of the activating device on the operating sleeve, and at least initially
4 retaining the sleeve in position to close the fluid port.

1 50. (New) A downhole tool having first and second configurations and
2 adapted to be run into a bore in the first configuration, the tool comprising:

3 a body adapted to be mounted on a tubular string and having an axial through
4 bore for permitting passage of fluid therethrough while the tool remains in the first
5 configuration;

6 an activating sleeve configured to travel through the string to land on the body
7 and activate the tool; and

8 flow responsive means for cycling the activated tool between the first and
9 second configurations in response to variations in fluid flowrate through the tool.

1 51. (New) The tool of claim 50, further comprising indexing means for
2 controlling cycling of the tool between the first and second configurations and
3 permitting the tool to be in either one of the first and second configurations while the
4 fluid flowrate is maintained at a normal, operational level.

1 52. (New) The tool of claim 50, wherein the activating sleeve is adapted
2 to release a coupling on landing on the body to activate the tool into the second
3 configuration.

1 53. (New) The tool of claim 50, further including means for biasing the
2 tool towards the first configuration.

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1 54. (New) The tool of claim 50, wherein the flow responsive means
2 includes a differential piston.

1 55. (New) The tool of claim 50, wherein the flow responsive means
2 includes a flow restriction.

1 56. (New) The tool of claim 55, wherein the flow restriction is defined by
2 the activating sleeve.

1 57. (New) The tool of claim 55, wherein the flow responsive means
2 includes at least two axially spaced flow restrictions.

1 58. (New) The tool of claim 50, wherein the tool is a bypass tool, the body
2 defining a bypass port and wherein the bypass port is closed in the first configuration
3 and open in the second configuration.

1 59. (New) A method of operating a downhole tool, the method
2 comprising:

3 running a tool into a bore on a string with the tool in a first configuration;

4 passing fluid through the string and an axial through bore defined by the tool
5 with the tool remaining in the first configuration;

6 passing an activating sleeve from surface through the string to land on and
7 activate the tool; and

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9 cycling the activated tool between first and second configurations in response
to variations in fluid flowrate through the tool.

1 60. (New) The method of claim 59, further comprising maintaining fluid
2 flow through the string and body at a normal operational level at least as the
3 activating sleeve passes through the string and lands on the tool.

1 61. (New) The method of claim 60; further comprising maintaining fluid
2 flow through the string and body at normal operational level following landing of the
3 activating sleeve on the tool, and at least initially retaining the tool in the first
4 configuration following landing of the activating sleeve on the tool.

1 62. (New) The method of claim 59, further comprising maintaining the
2 tool in the first configuration while the fluid flowrate is maintained at a normal,
3 operational level, and subsequently maintaining the tool in the second configuration
4 while the fluid flowrate is maintained at a normal, operational level.

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